

### REMARKS/ARGUMENTS

The Office Action of September 11, 2006, has been carefully reviewed and these remarks are responsive thereto. Claims 1-34 remain pending and allowance of the instant application are respectfully requested.

#### *Allowable Subject Matter*

Applicants thank the Examiner for indicating allowable subject matter with respect to claims 6, 19, and 32.

#### *Claim Rejections Under 35 U.S.C. §102(e)*

Claims 1-4, 9-11, 29, and 34 were rejected under 35 U.S.C. §102(e) as being anticipated by Willars et al. (U.S. Patent Publication Number 2003/0013443 A1). This rejection is respectfully traversed for the following reasons.

Claim 1, as amended, recites, *inter alia*, "a method of handing off a mobile terminal from a first network served by a first access device to a second network served by a second access device..." and step "3) in response to determining that the mobile terminal is authorized to be handed off to the second access device, performing a handoff operation from the first access device to the second access device, wherein the second access device then has full control over the connection with the terminal."

Willars fails to teach or even suggest a first network served by a first access device and a second network served by a second access device. The Office Action states that a Serving Network reads on a first network and that a Drift Network reads on a second network. Office Action, p. 2-3. Contrary to this assertion, Willars makes no mention of a Serving Network or a Drift Network, but rather discusses a Drift *Controller* and a Serving *Controller*. In fact, Willars teaches a single radio access network 14 having one or more radio network controllers (SRNC & DRNC). P. 4, ¶ 48; *see also* FIG. 1A. The multiple network controllers may help control radio resources and radio connectivity (p. 1, ¶ 6), but do not suggest or imply the existence of other networks, as asserted by the Office Action on pp. 2-3. That is, Willars only uses a single network.

As such, Willars fails to teach or suggest a method of handing off a mobile terminal from a first network served by a first access device to a second network served by a second access device.

In addition, Willars does not disclose step 3) of claim 1 because there is no "handoff" disclosed in Willars "wherein the second access device then has full control over the connection with the terminal." Rather, Willars discloses that if "an RNC is a serving RNC (SRNC), the RNC is in charge of the connection with the user equipment (UE), e.g., it has full control of the connection within the radio access network (RAN)." P. 2, ¶ 13. There is no teaching in Willars that the SRNC ever relinquishes its full control of the connection with the user equipment (UE) to the drift RNC (DRNC).

Claim 1 is thus allowable for at least the above reasons.

Claims 2-4 and 9-11 are dependent on claim 1 and are thus allowable for at least the same reasons as claim 1 and further in view of the novel and non-obvious features recited therein.

Additionally, claim 3 recites, *inter alia*, "the method of claim 1, wherein steps (1) through (4) are performed without allocating any radio frequency resources of the second access device to communicate with the mobile terminal until after it is determined that the mobile terminal is authorized to be handed off to the second access device." Even assuming, without admitting, the DRNC is a second access device, Willars does not teach or even suggest that steps (1) through (4) of claim 1 are performed without allocating any radio frequency resources of the second access device to communicate with the mobile terminal until after it is determined that the mobile terminal is authorized to be handed off. To the contrary, Willars states that "if an RNC is a drift RNC (DRNC), it supports the serving RNC (SRNC) by *supplying radio resources* (within the cells controlled by the drift RNC (DRNC)) needed for a connection with the user equipment unit (UE)." P. 2, ¶ 13. Nowhere does Willars suggest that radio resources are not allocated until after authorization. Thus, claim 3 is allowable for this additional reason.

Claim 29, as amended, recites, *inter alia*, "A method of handing off a mobile terminal from a first network served by a first access device to a second network served by a second access device..." and step "3) in response to determining that the mobile terminal is authorized to be handed off to the second access device, performing a handoff operation from the first access device to the second access device, wherein the second access device then has full control over the connection with the terminal." Willars fails to teach or even suggest such a feature. As

discussed with respect to claim 1, Willars lacks any teaching of a first and a<sup>3</sup> second network, and does not disclose a handoff "wherein the second access device then has full control over the connection with the terminal." Claim 29 is thus allowable for at least these reasons.

Claim 34 depends on claim 29 and is thus allowable for at least the same reasons as claim 29 and further in view of the novel and non-obvious features recited therein.

In addition, claim 34 recites, inter alia, "wherein steps (1) to (4) are performed without allocating any radio frequency resources for communicating between the second access device and the mobile terminal until after it has been determined that the mobile terminal is authorized to be handed off to the second access device." Similar to the arguments presented with respect to claim 3, Willars fails to teach or even suggest such a feature. As such, claim 34 is allowable for this additional reason.

***Claim Rejections Under 35 U.S.C. §103(a)***

Claims 5 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Chambert (U.S. Patent No. 5,499,387). This rejection is respectfully traversed for the following reasons.

Chambert generally relates to handoffs in a mobile radio communication system. More specifically, Chambert discloses a method for facilitating a second handoff immediately after a first handoff without requiring that a certain amount of time has elapsed. Col. 1, ll. 48-53. The method involves measuring signal strength from potential surrounding base stations when performing a first handoff and using that same data for making an immediate second handoff. Col. 3, ll. 41-53.

In order to rely on a reference under 35 U.S.C. § 103, the reference must be analogous prior art. MPEP §2141.01(a). Chambert fails to satisfy this requirement and thus, the Examiner's use of Chambert as a basis for rejection is improper. According to the Federal Circuit, the applied reference "must either be in the field of Applicants' endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). As discussed above, Chambert deals exclusively with measuring signal strength and using prior measurement data to increase the efficiency of handing off a mobile terminal on two consecutive occasions (one immediately after another), without a

significant lapse of time. Applicants' invention, on the other hand, teaches method and apparatus for *pre-authorizing handovers* of mobile terminals among access routers in communication networks. Nowhere does Chambert mention or even suggest pre-authorization technology for handovers of mobile terminals. As such, the fields of endeavor of Applicants' invention and the Chambert invention are entirely different. Similarly, Chambert's method of improving consecutive handoff efficiency is not reasonably pertinent to the Applicants' problem of pre-authorizing handovers of a mobile terminal between two networks. Chambert would not have logically "commended itself to [the] inventor's attention in considering his problem." *In re Clay*, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992). As such, Applicants respectfully requests the withdrawal of Chambert as a basis of rejection for at least this reason. In addition, even if combined, Chambert does not cure the deficiencies of Willars. Claims 5 and 31 are thus allowable for at least these reasons.

Claims 7, 8, 30 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Kennedy, III *et al.* (U.S. Patent No. 5,966,658) (hereinafter "Kennedy"). This rejection is respectfully traversed for the following reasons.

Kennedy generally relates to the automatic selection of a communication path. More specifically, a mobile unit may automatically select a communication path by considering a variety of factors. Col. 5, ll. 52-66. In short, the mobile unit determines the desirability of each alternate communication path and may switch to an alternate path if the path is deemed more desirable.

Like Chambert, Kennedy fails to satisfy the analogous art requirement. As described above, Kennedy's field of endeavor relates to choosing a communication path that will maximize a particular set of path characteristics. Col. 1, ll. 5-7; *see also* Col. 1, ll. 47-57. In contrast, Applicants' invention teaches a method of performing the handoff of a mobile terminal to a target access device/network using pre-authorization to avoid handovers resulting in a denial of service. Specification, p. 3-4, ¶¶ 11-12. As such, Kennedy's invention does not fall within Applicants' field of endeavor and is highly distinguishable. Moreover, Kennedy is not reasonably pertinent to the problems Applicants' invention seeks to solve and thus, Applicants would not be reasonably expected to examine Kennedy in considering those problems. At no point does Kennedy address or suggest any of the deficiencies of unauthorized handovers identified in Applicants'

specification. As such, Applicants respectfully request the withdrawal of Kennedy as a basis of rejection. In addition, even if combined, Kennedy does not cure the deficiencies of Willars. Claims 7, 8, 30 and 33 are thus allowable for at least these reasons.

Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Igarashi *et al.* (U.S. Patent Pub. No. 2001/0053694) (hereinafter "Igarashi"). This rejection is respectfully traversed for the following reason.

The Office Action fails to offer any evidence why one of ordinary skill in the art would be motivated to combine the Willars and Igarashi references. The Federal Circuit has repeatedly stated that the limitations of a claim in a pending application cannot be used as a blueprint to piece together prior art in hindsight, *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), and that the Patent Office should *rigorously* apply the requirement that a teaching or motivation to combine prior art references needs to be provided. *Id.* (emphasis added). The Office Action only offers that the combination would have been obvious "in order to comply with Internet standards of transporting information via IP." Yet Willars specifically reads on a radio network system that operates of radio communication protocols such as Wideband, Code Division Multiple Access (WCDMA). P. 5, ¶ 51. The Office Action fails to identify and explain the alleged motivation of complying with Internet standards of transporting information via IP (i.e. DIAMETER) in a radio access network. The Office Action is improperly and impermissibly using Applicants' invention as a blueprint. As such, claims 12 and 13 are allowable for at least this reason.

Claims 14-17 and 22-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Willars in view of Funato *et al.* (U.S. Patent Pub. No. 2003/0087646) (hereinafter "Funato").

Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars and Funato in view of Chambert.

Claims 20 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars and Funato in view of Kennedy.

Claims 27 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars and Funato in view of Igarashi.

The rejections in based on Willars in view of Funato are respectfully traversed for the following reasons. Independent claim I4, as amended, recites, "An access router that serves mobile terminals within a service area, comprising a processor that performs the steps of: . . . (3)

in response to determining that the mobile terminal is authorized to be handed off to the access router, performing a handoff operation with the another access router, wherein the access router then has full control over the connection with the terminal. . . ." As noted above with respect to independent claims 1 and 29, Willars fails to teach or even suggest such a feature. Funato does not remedy this deficiency in Willars. Thus, claim 14 is thus allowable for at least this reason. Similarly, dependent claims 15-28, are patentable over the proposed combination of Willars and Funato, and the proposed combination of Willars and Funato, when further combined with either Chambert, Kennedy, or Igarashi. Chambert, Kennedy, and Igarashi each fails to remedy the above deficiency in Willars and Funato. Therefore, Applicants respectfully request withdrawal of the rejections of these claims.

### CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully requests prompt notification of the same. If there are any questions, the examiner is invited to contact Applicants' undersigned representative at the number noted below.

Respectfully submitted,

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